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PUBLIC UTILITIES COMMISSION

The Honorable Chairman and Members of
the Hawaii Public Utilities Commission
465 South King Street
Kekuanaoa Building, 1st Floor
Honolulu, Hawaii 96813

Dear Commissioners:

RE: Docket No. 05-0069 -- Application of Hawaiian Electric Company, Inc. for Approval and/or Modification of Demand-Side and Load Management Programs and Recovery of Program Costs and DSM Utility Incentives

Pursuant to the procedural schedule agreement for the instant proceeding, the Consumer Advocate provides its Response to Hawaiian Electric Company, Inc. ("HECO" or "Company") Interim Demand-Side Management ("DSM") Proposals, as presented to the parties on December 5, 2005.

I. OVERVIEW.

The brief procedural history of this proceeding is as follows. On October 11, 2005, HECO informally provided the Parties to the instant proceeding with a preliminary version of its interim proposals to modify certain DSM programs (i.e., the Interim DSM Proposals). On November 2, 2005, a technical conference was held to discuss these informal Interim DSM Proposals. The Consumer Advocate participated in the session, along with other parties to the proceeding. The Company also provided certain errata sheets revising some of the figures contained in the informal Interim DSM Proposals filing.

On November 18, 2005, the Consumer Advocate provided the Company with its informal written comments on the informal Interim DSM Proposals. In these comments, the Consumer Advocate indicated to the Company that the Interim DSM proposals were problematic because the proposals lacked context in relation to: (1) the objectives that the Company was seeking to achieve through the implementation of the Interim DSM Proposals, and (2) how the proposed set of Interim DSM Proposals would achieve the stated objectives better than other alternatives. The Consumer Advocate also stated that all parties to this proceeding would benefit from adherence to a simple, direct framework for analyzing and justifying the request to implement such programs. The Consumer Advocate further stated that the Company's informal Interim DSM Proposals did not appear unreasonable given HECO's claimed reserve capacity shortfall, but that additional information was needed to determine whether the Interim DSM Proposals should be approved on a long-term basis. Finally, the Consumer Advocate identified certain inconsistencies and questions relative to the material provided to support the Company's informal Interim DSM Proposals.

On December 5, 2005, the Company formally filed its Interim DSM Proposals with the Commission. HECO states that the purpose of this filing is to request Commission approval of: (1) modifications to HECO's existing energy efficiency demand-side management programs (i.e., HECO's Commercial and Industrial Energy Efficiency Program ("CIEE"), Commercial and Industrial Customized Rebate Program ("CICR"), Commercial and industrial New Construction Program ("CINC")); and (2) a new interim DSM program (i.e., Interim Energy $olutions for the Home Program ("Interim E$H")), collectively refered to as HECO's "Interim DSM Proposals." Other existing DSM programs would continue without modification, pending an order in the instant docket. HECO has requested expedited approval of its filing.

The Consumer Advocate notes that HECO's December 5, 2005 Interim DSM Proposals filing is very similar to the October 11, 2005 informal presentation. Although additional information was provided by the Company in the December 5, 2005 filing to address the Consumer Advocate's November 18, 2005 comments, additional information is still required before the Interim DSM Proposals can be accepted on a long-term basis.

In the ensuing sections of this document, the Consumer Advocate provides comments on the Company's December 5, 2005 filing, as follows:

> First, the Consumer Advocate indicates that the Interim DSM Proposals filing is problematic because the DSM proposals still lack context in relation to the Company's claimed need for incremental resources to address a reserve capacity shortfall. This concern is discussed more fully in Section II, below.
>
> Second, the Consumer Advocate offers a view of the actions that the Company should take to: (a) set a proper context for its interim DSM

programs, and (b) implement DSM programs consistent with its true resource needs. An example of the process that should be followed is outlined in Section III, below.

Third, the Consumer Advocate offers its assessment of the interim DSM programs that HECO is advancing in this proceeding in Section IV, below.

Fourth, the Consumer Advocate provides comments in Section V below on certain cost recovery issues, including HECO's continued request to recover lost margins and shareholder incentives in spite of the Company's agreement to cease such recovery effective with the implementation of the interim rates in the pending rate case that is the subject of Docket No. 04-0113.

Finally, the Consumer Advocate's recommendations are presented in Section VI, below.

II. <u>HECO'S INTERIM DSM PROPOSALS ARE PROBLEMATIC BECAUSE THEY LACK CONTEXT REGARDING THE RESOURCE NEEDS AND PORTFOLIO DESIGN OBJECTIVES THAT ARE TO BE MET THROUGH THESE PROGRAMS.</u>

The Consumer Advocate observes that HECO's Interim DSM programs have merit only if they offer a sensible transition to the Company's long-term DSM programs, all of which should be part of a well-planned resource portfolio. The Company's December 5, 2005 filing gives rise to questions in this regard, largely because HECO's Interim DSM Proposals appear to lack context regarding HECO's resource needs and the portfolio design objectives that are to be met by implementing the proposed DSM programs. While the Consumer Advocate herein recommends Commission approval of HECO's Interim DSM Proposals so as not to delay action to address a possible reserve capacity shortage, there are significant deficiencies in HECO's filing that require attention before concluding that the Interim DSM Proposals should continue as part of HECO's IRP-3 Action Plan.

In recommending that HECO's proposed Interim DSM Proposals be approved at this time in spite of the above shortcomings, the Consumer Advocate anticipates that such approval granted by the Commission will be temporary. That is, the Consumer Advocate anticipates that the proceeding to establish a "final" set of DSM programs will be concluded in a timely manner in keeping with the schedule that has been established for this docket. If becomes apparent that these "interim" DSM programs might remain in place for an extended period, the Consumer Advocate reserves the right to ask the Commission to reexamine the continuation of the Interim DSM Proposals should the

various concerns identified herein by the Consumer Advocate remain unresolved at the conclusion of the panel hearing to be conducted in the instant proceeding.

Essential first steps of any resource planning process are the identification of: (1) system needs, and then (2) the planning objectives that derive from that need.[1] It appears that, aside from not-well-supported statements that the Company has a reserve capacity shortfall, HECO has failed to clearly establish the need for additional resources in general, and for its Interim DSM Proposals in particular. The Company has presented no evidence of a routine effort (e.g., daily, weekly, or monthly, for example) to compile up-to-date information regarding the key inputs to its resource need assessment. Nowhere in the December 5, 2005 filing is there an explanation of HECO's current needs (i.e., an up-to-date calculation of the reserve capacity shortage faced by HECO based on an updated load forecast that incorporates information on last summer's peak, and the most recent results for DSM program savings, existing supply resource availability, etc.), or its resultant planning objectives.

The Consumer Advocate acknowledges that HECO included Appendix C in its December 5, 2005 filing, which provided some additional justification for its projected reserve capacity shortfall. Rather than provide actual supporting data, however, the Company simply provided references to responses to discovery in other dockets and to the March 10, 2005 Adequacy of Supply report. The Company failed to provide current information that reflects changes, if any, to the information previously provided, and also requires a search for the data in multiple filings. To help the Commission understand the nature and size of the reserve capacity shortfall, the Company should provide a concise, up-to-date presentation of both the supporting data and resultant need. The presentation should include all supporting documentation relied upon to reach the stated conclusions, the assumptions made, and the basis for such assumptions. This information is necessary to perform an independent evaluation of HECO's presentation.

As a result of the above, the Consumer Advocate attempted to compile such a presentation, based upon the information provided by HECO. Attachment 1 to this filing provides a graphical presentation, while Attachment 2 provides the underlying data in tabular form. Please note that this presentation is illustrative only, as the Consumer Advocate does not have access to all necessary information required to perform the analysis (including up-to-date information on customer needs compared to the available means of meeting such needs). For example, the data in this presentation does not include any purchases from the Tesoro or Chevron refinery facilities, which HECO has

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1 Examples of planning objectives that the Company could adopt as part of its planning process are to: (a) maintain bulk power system reliability within established standards by acquiring supply-and demand-side resources sufficient to eliminate any reserve capacity deficiencies during the Summer of 2006, and (b) acquiring all possible cost-effective DSM measures that reasonably can be implemented to address any reliability needs.

described as "intermittent" or "as-available" purchases. The past and future capacity contributions of these facilities are not known; a question arises regarding why they are afforded no contribution at all.

The Consumer Advocate anticipates that the Interim DSM Proposals have their roots in HECO's IRP-3 planning process. However, the Consumer Advocate has observed that the Company failed to clearly identify its needs at a system level and failed to translate any such needs into specific planning objectives through its IRP process. The Consumer Advocate and HECO are, however, currently engaged in discussion to resolve the planning deficiencies that the Consumer Advocate contends persist in HECO's IRP-3 filing, as were documented in its July 28, 2005 letter to the Company commenting on its Draft IRP filing. Nonetheless, concerns remain that the Company's Interim DSM Proposals lack a foundation in proper planning.[2]

The approach behind the proposed DSM programs seems to focus on finding something to satisfy all interested stakeholder/parties to HECO's IRP-3 process and the instant proceeding. This situation may be causing confusion regarding the objectives that HECO's DSM programs are intended to meet from an overall planning perspective. The Consumer Advocate's observation and concern became apparent in the November 2, 2005 Technical Meeting when the Consumer Advocate heard multiple views expressed by participants on the objectives that are intended to be achieved with HECO's proposed DSM programs.

The Consumer Advocate maintains that the Company's DSM programs should be those that derive from clear objectives, and that these objectives should best serve the needs of the Company and its ratepayers at the lowest reasonable cost. For example, the Consumer Advocate is particularly concerned because it appears that insufficient attention is being paid to basic cost and reliability objectives in the Company's resource planning processes. The Consumer Advocate notes that information filed in Docket No. 04-0113 shows that the commercial and industrial load management ("CILM") program is projected to produce much larger reductions in system peak load at a per KW-year cost that appears to be lower than that of the compact fluorescent light program, which is now being advanced as part of the Interim

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2 The Consumer Advocate notes, for example, that (notwithstanding the discussion of "Objectives and Measures" in Chapter 4, and the discussion of "Demand-Side Resource" in Chapter 6 of the document) HECO's IRP-3 does not appear to offer guidance regarding the level of cost-effective DSM programs that should be implemented to address HECO's near-term need for capacity (as discussed on page 9-21 of the IRP-3 filing).

E$H Program.[3] Given HECO's apparent need to reduce reserve capacity shortfalls that are anticipated to occur in 2006 through 2009, the Consumer Advocate is concerned that cost-effective means of achieving system peak reductions in the near-term may be missed.

It thus appears that HECO has: (1) neglected to routinely – e.g., on a day-to-day basis – perform a systematic assessment of its position relative to the alleged reserve capacity deficiency and (2) ignored opportunities to pursue capacity savings that could offset the Company's immediate needs. This suggests that HECO sees no urgency relative to the reliability deficiency that it identifies. Rather, it appears that meeting basic reliability standards has become a secondary consideration.

Without a clear view of HECO's needs and basic planning objectives, it is difficult to evaluate HECO's Interim DSM Proposals.[4] Resource options cannot be evaluated in a vacuum. Rather, a clear understanding of the Company's incremental energy needs, capacity needs, renewable portfolio standard ("RPS") requirements, emissions requirements, etc., are essential to conduct a proper evaluation of the action plans intended to achieve such objectives. As noted in Section III.D.a. of the Commission's IRP Framework, the utility shall include in its IRP a full and detailed description of the objectives to be attained by the plan, the measures by which achievement of the objectives is to be assessed, the resource options or mix of options included in the plan, the assumptions and the basis of the assumptions, etc. None of these have been provided by HECO to the extent necessary to allow for an independent evaluation of the Company's Interim DSM Proposals. Under HECO's filing, one can only guess as to which interim and long-term programs, program measures, budgets, etc., might be the most effective in serving the Company and its ratepayers.

III. <u>STEPS TO A PROPER CONTEXT FOR THE DESIGN AND IMPLEMENTATION OF INTERIM DSM PROGRAMS.</u>

If HECO truly has a reserve margin shortfall for the years 2006 to 2009 which results from a capacity shortage, or otherwise expects to fail to meet one or more of its

3 See Exhibit HECO-1102 in Docket No. 04-0113, page 169 of 169. Annual program TRC costs are $500,920 and annual demand savings average 21,000 KW over the 15 year assumed life of the program, for an average cost of approximately $24 per KW-yr. Even the first year produces savings of 7,000 KW for costs of $500,920, for an average cost of approximately $72 per KW-year. Both methods of estimating the cost effectiveness of the CILM program show that this program is more cost-effective in reducing peak demand than the Interim E$H Program.

4 As noted above and as discussed further below, the Consumer Advocate herein recommends Commission approval of HECO's Interim DSM Proposals so as not to prevent action to address a possible reserve capacity shortage. Nonetheless, there are significant deficiencies in HECO's filing that require attention.

established reliability planning criteria, immediate and aggressive corrective action is warranted. Ideally, before such actions are taken, important questions such as the following should be addressed. What are all the alternatives that HECO could deploy to remedy that shortage? Which alternatives are likely to be most beneficial to HECO's customers? Would the funds being proposed for interim DSM programs, which are expected to save 6 MW, be better spent on a different set of DSM measures? What else should the Company do to alleviate the projected shortfall?

In order to support swift, effective action to address any reliability deficiency the Consumer Advocate recommends that HECO be required to present to the Commission, as soon as is reasonably possible, the following information:

1. HECO should provide a current, up-to-date assessment of its needs (e.g., for incremental energy and capacity) and the specific planning objectives that result;

2. HECO should identify the full range of feasible new supply-side and demand-side resources that could be considered as potential responses to its needs; [5]

3. HECO should, in determining the level and types of DSM programs that will be implemented, apply cost-effectiveness tests that reflect the current reality – e.g., an up-to-date assessment of HECO's need for incremental capacity. The Consumer Advocate anticipates that the response to system emergencies may require the Company to revisit the standards of cost-effectiveness that it otherwise would use in assessing potential new resources; and

4. HECO should obtain capacity savings from demand-side resources until the need is filled (or to the maximum feasible quantity).

5. If a shift in the emphasis within demand-side programs (e.g., from less productive programs to commercial and industrial chillers) will produce a meaningful improvement relative to specific planning objectives (e.g., a net increase in capacity savings), such change should be implemented.

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5 For example, nowhere in the Interim DSM Proposals filing does the Company identify or discuss any alternatives to the proposed Interim DSM Proposals. As discussed above, there appear to be examples of other DSM programs that are more cost-effective than some of the DSM programs proposed in the instant Interim DSM Proposals. The Company should explain why it should not be expected to implement or expand those more cost-effective programs to meet its immediate reliability needs. Such assessment likely would require discussion of the supply-side options, such as leased generating units that could be implemented to address the problem.

Simply put, if up-to-date assessments support the Company's claim that a reserve capacity shortfall is eminent, and such shortfall is expected to be on the order of 70 MW in 2006, the Company should be required to pursue all reasonable opportunities to realize capacity reductions, including those offered by DSM measures.

IV. IF ONE ACCEPTS HECO's CLAIM THAT IT HAS A RESERVE CAPACITY SHORTAGE, THE PROPOSED DSM PROGRAMS DO NOT APPEAR UNREASONABLE – BUT HECO SHOULD PROVIDE MORE INFORMATION AS SOON AS POSSIBLE.

HECO has stated that it has a reserve capacity shortage. Because of this concern and the potential adverse consequences of such shortage, the Consumer Advocate recommends that HECO's Interim DSM Proposals be approved and implemented with all due haste. The Company has indicated that all of its proposed interim DSM programs are cost-effective. The Company has indicated that these DSM programs can be easily implemented to help achieve peak load reductions quickly. Therefore, the Consumer Advocate recommends that the broad concerns discussed above and the specific informational deficiencies presented below be temporarily set aside, and that the Commission approve, on a temporary basis, the implementation of HECO's Interim DSM Proposals. If HECO's reserve capacity shortage is real, even limited action to immediately accelerate and expand demand-side measures would be better than none.

Nonetheless, there are important unanswered questions regarding the magnitude and types of the particular DSM programs that HECO is proposing to pursue. For instance, it appears unaddressed at this juncture whether additional DSM measures (perhaps coupled with an increased budgetary commitment to all) should be implemented. In this section, the Consumer Advocate presents its assessment anc concerns with the specific program proposals. Each of these concerns should be addressed with the "final" set of DSM programs that the Company advances for approval in this proceeding.

A. INTERIM ENERGY $OLUTIONS FOR THE HOME ("E$H") PROGRAM.

1. Program Overview:

HECO is proposing a new Interim E$H program to supplement its existing DSM programs pending resolution of a "final" set of DSM programs in this Docket. The Interim E$H program is intended to encourage customers to install compact fluorescent lamps ("CFLs") and replace incandescent light fixtures as a means of achieving capacity reductions. This program provides point-of-sale rebates of approximately $2.50 per

CFL,[6] which are assumed to be sold in packages of three. Customer cost before the rebate is assumed to be $5.75[7] per lamp, or $17.25 per package of three. HECO anticipates that 60,000[8] customers will purchase a three-CFL package, and thus will install a total of 180,000[9] CFLs. In projecting savings from this program, 60-watt incandescent bulbs are assumed to be replaced with 20-watt CFLs.[10] Gross system level savings are projected to be 2,470 KW and 13,244,696 KWH per year for five years.[11] Administration costs are estimated to be $540,652 in 2006, while total incentives are $450,000.[12] Using the Total Resource Cost ("TRC") test, the above assumptions yield a benefit/cost ratio of 2.72.[13] In general, programs with benefit/cost ratios greater than 1.0 are considered to be cost-effective, so this program should produce benefits to customers. The following is the Consumer Advocate's assessment of this program.

2. Discussion.

First, HECO has indicated that the purpose of this interim proposal is to "impact the system peak and avoid reserve capacity outages." The Consumer Advocate presumes this means that HECO is seeking to implement interim DSM programs that provide the maximum reduction in system peak load. The degree to which the proposed Interim E$H Program will achieve this objective, however, is not clear. Assuming 40 watts in savings per CFL, 180,000 CFLs should result in a total savings of 7,200 KW [14] of demand if all CFL lamps are "on" (i.e., replacing incandescent light bulbs that otherwise would be "on") at the time of the system peak. Yet, HECO's assumed customer-level peak load reduction at system peak is only 2,196 KW [15] or a mere 30%

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6 See Exhibit B, page 4

7 Ibid.

8 See Exhibit B, page 2.

9 Ibid.

10 Per HECO Technical Session.

11 See Exhibit B, page 11.

12 See Exhibit B, page 10.

13 See Exhibit B, page 7.

14 (60 watts – 20 watts) times 180,000 lamos = 7,200 KW

15 See Exhibit B, page 11.

of the maximum 7,200 KW of demand that can be achieved if 180,000 CFLs are installed resulting in 40 watts in savings per CFL. The basis for the observed discrepancy has not been provided.

Furthermore, according to worksheets provided by HECO, the total resource costs for this program are estimated to be $1,411,750 (net present value in 2006 dollars).[16] Levelized over the projected five-year life of the Interim E$H program, this equates to an annual cost of $327,391,[17] beginning in 2006. With system peak savings of only 2,196 KW the levelized total resource cost of peak load reductions is approximately $150 per KW-year.[18]

Second, on pages 11 and 12 of Exhibit B, the Company provided two spreadsheets that contain back-up information on program assumptions and the benefit/cost calculations. The information contained in these spreadsheets differs from that provided in the Company's program description. For example, in the program description, peak savings are 2,196 KW and energy savings are 11,765,263 KWH.[19] In the supporting spreadsheets provided on page 12 of Exhibit B, however, the respective figures are 2,101 KW and 11,257,991 KWH. The Commission should direct the Company to reconcile and explain these differences. If the difference lies in the gross to net ratio adjustment for free riders, the Company should explain the basis for the calculation of the difference.

Furthermore, on page 12 of Exhibit 15, the program administration costs and participant costs appear to be different from figures provided on page 11 of the same Exhibit. The Consumer Advocate also recommends that the Commission direct the Company to explain these matters.

Third, HECO also should be directed to explain how the system peak load reductions are estimated, specifically showing the assumptions and calculations made to derive these estimates. The current footnotes do not provide the information necessary to independently assess the reasonableness of the Company's estimates.

Fourth, HECO has designed the Interim E$H Program such that customers would receive their rebate directly at the retailer's point of sale. The retailer then would seek reimbursement from HECO. This design was advocated by HECO as being efficient. Under this program design, however, HECO would not receive any

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16 See Exhibit B, page 12.

17 Calculated using PMT function, with n=5, i=8%, PV = $1,411,750.

18 $327,391 ÷ 2,196 KW = $149 or $150 rounded.

19 See Exhibit B, page 11.

information, such as name, address and account number, about the customer making the purchase. Without such information, it will be impossible for HECO to effectively evaluate how well the program is working and the actual reductions in the system peak that are being achieved. The Consumer Advocate notes that similar programs in other jurisdictions often employ mail-in rebates, where the customer provides critical information before receiving a rebate. The information allows the utility to track the energy use of the customers and measure the reductions in energy use against the reductions in system peak to evaluate the program effectiveness. HECO has stated that its proposed design is more cost-effective than alternative designs. The Company fails, however, to provide any evidence or economic comparisons as to why its preferred approach is best.[20]

Fifth, HECO requests the flexibility to establish customer incentive levels for other, higher-priced lighting products without Commission approval. The Company states that this is because "a CFL program of the scope and depth of the proposed Interim E$H Program has not been implemented before in Hawaii" and "Lamp applications are likely to transition during program implementation to respond to customer needs and incentive levels may need to reflect these changes."[21]

Because the lighting products that will be available for sale are generally known and available to HECO, the Consumer Advocate sees no reason for the Commission to grant such open-ended approval. If the Company seeks to receive approvals for customer incentives associated with other lighting products, it should request specific approvals with its filing for a "final' set of DSM programs, and submit all assumptions and calculations to support each request (including a full benefit/cost analysis).

3. Recommendation.

For the reasons discussed above, the Consumer Advocate recommends that the Interim E$H Program be approved on a temporary basis. The Commission should require that further information be provided, as indicated herein, to support an independent review of the "final" DSM programs that the Company proposes to implement. Given the temporary nature of the Commission's approval of the Interim E$H Program, the Consumer Advocate would recommend against allowing HECO to modify customer incentive levels (i.e., in response to changing conditions) at this time.

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20 The Consumer Advocate also notes that on Table 1, page 5 of Exhibit 15, seven of the nine products to qualify under this program appear to be sold in only one store.

21 See Exhibit B, page 9.

B. COMMERCIAL & INDUSTRIAL ENERGY EFFICIENCY ("CIEE") PROGRAM.

1. Program Overview.

HECO's existing CIEE Program is designed to provide a full range of energy efficiency options from air conditioning to lighting. This program offers cash rebates to non-residential customers who purchase high-efficiency equipment or incentives to dealers who sell such equipment. The target market is commercial and industrial ("C&I") customers who are replacing end use equipment in existing buildings or purchasing such equipment for the first time. HECO relies upon relationships with trade allies and suppliers and promotions via newsletters and point of purchase materials. Participating dealers submit sales transaction documentation to the Company, and the Company will process them and mail incentive payments. Participating customers mail a coupon and the original receipt of purchase to HECO, who issues rebate checks.

HECO indicates that its CIEE program was approved by the Commission in Docket No. 94-0012. In this Interim DSM filing, HECO is proposing to continue implementing the program in its current form, but for one modification: The Company proposes to increase the customer incentives that it provides, such that the incentive would cover 25% of the customers' incremental costs of installed measures under this program. These increased incentives would apply to certain prescriptive measures including air conditioning equipment (excluding chillers), T8 lighting, and de-lamping. See December 5 Filing, Exh. A at 1.

HECO states that the increased incentives are necessary in order to:[22]

- Address slowing growth in program participation;
- Demonstrate to energy efficiency equipment suppliers that HECO has the ability to influence the energy efficiency market and so motivate them to stock and sell energy efficient equipment;
- Meet (and achieve) program goals; and
- Be consistent with industry practice.

The Company states that the reason for proposing changes to the CIEE Program at this time is to mitigate the reserve capacity shortfall and respond to diminishing program participation. HECO notes that other CIEE program changes have been proposed in this docket to achieve higher goals, but these other changes take more time to develop, thus are not being proposed for interim approval. December 5 Filing, Exh. A at 2. HECO identifies the benefit/cost ratio of the proposed modified CIEE program as 1.65 under the Total Resource Cost Test. December 5 Filing, Exh. A at 8.

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[22] See December 5 Filing, Exh. A at 2.

2. Discussion.

The Company provided spreadsheets with supporting information on underlying program assumptions and the benefit/cost calculations. These spreadsheets are unclear on matters that are important to understanding the Company's proposal. For example, page 8 of Exhibit A of the December 5 filing contains program administration costs, utility costs, and participants' costs that are different than similarly-labeled figures shown on other pages. If the difference lies in gross to net ratios, this should be explained as well as the basis for calculating the difference. Also, the benefit cost ratios for the CIEE program listed on page 4 of Exhibit A are different from the cost ratios shown on page 8. Accurate benefit/cost evaluations are important in assessing the merits of any DSM program. Therefore, the Commission should seek further explanation of some items in these spreadsheets.

3. Recommendation.

For reasons discussed above, the Consumer Advocate recommends that the modifications to the CIEE program be approved on a temporary basis. The Commission should require that further information be provided, as indicated herein, to support a review of the "final" DSM programs that the Company proposes to implement.

C. COMMERCIAL & INDUSTRIAL CUSTOMER REBATE ("CICR") PROGRAM.

1. Program Overview.

The purpose of the existing CICR Program is to provide customized energy efficiency services to HECO's large commercial and industrial customers. Qualifying measures include high-efficiency chillers and refrigeration, energy management control systems, industrial process applications, cooling equipment services, and building commissioning. In the customized rebate approach, the customer installs the recommended energy efficiency equipment, and receives a rebate based upon 1.5 times the annual energy and demand savings. The existing program includes a restriction prohibiting the payment of any rebate for measures that have a two-year payback without any incentive from the utility. This program is promoted and delivered through personal visits by HECO's customer contact personnel.

HECO indicates that its CICR program was approved by the Commission in Docket No. 94-0011. In its interim DSM filing, HECO is proposing to continue to implement that program in its current form, but for one modification: The Company proposes to eliminate the two-year minimum payback criterion that currently establishes an eligibility requirement within the CICR Program. The Company states that the reason for proposing changes to the CIEE Program at this time is to mitigate the reserve capacity shortfall and respond to diminishing program participation.

2. Discussion.

First, the Company provided spreadsheets with supporting information on underlying program assumptions and the benefit/cost calculations. Some of the items in these spreadsheets should be explained further. For example, the program costs and benefit cost ratios shown on page 14 of Exhibit A do not appear to agree with those shown on page 4.

Second, the Company should be directed to explain in greater detail the reasons for and the benefits expected from eliminating the two-year payback criterion. Specifically, it should explain how this proposed change causes changes in the assumptions in the benefit/cost analyses, particularly the measure costs.

3. Recommendation.

For reasons discussed above, the Consumer Advocate recommends that the modifications to the CICR program be approved on a temporary basis. The Commission should require that further information be provided, as indicated herein, to support a review of the "final" DSM programs that the Company proposes to implement.

D. COMMERCIAL & INDUSTRIAL NEW CONSTRUCTION ("CINC") PROGRAM.

1. Program Overview.

The purpose of the existing CINC Program is to capture lost opportunities to reduce electric demand and energy savings by providing customers with design assistance and custom rebates for the construction of new buildings, or in major renovations of existing buildings. The program provides the customer with the services of a consulting engineer to evaluate the effectiveness of energy efficiency measures being considered by the customer and to recommend measures overlooked or not being considered. The program also provides technical workshops and other activities for the design community to educate and familiarize themselves on energy efficiency design methods and new technologies. This program targets the same measures and utilizes similar delivery mechanisms as the CIEE program.

The Company provides a very brief description of the proposed changes to this program. HECO seeks approval to apply the increase in incentives and the elimination of the two-year minimum payback criterion discussed above (i.e., for the CIEE and CICR Programs) to the CINC Program. These higher customer incentives have increased both the program budget and the savings impacts. [23] An updated benefit cost analysis is provided with the new incentives included.

2. Discussion.

First, the Consumer Advocate notes that the benefit/cost ratios shown on page 11 of Exhibit A of the December 5 filing do not appear to agree with those listed on page 4. In addition, it is not clear why total program and participant costs as presented on page 10 differ from those on page 11. The Company also should be directed to explain why the weights of the prototype in measures are the same as those of the CIEE program.

Second, the Company should be directed to explain in greater detail the reasons for and the benefits of eliminating the two-year payback criterion and increasing incentive levels. Specifically it should explain how these proposed changes cause changes in the assumptions in the benefit/cost analyses, particularly the measure costs.

3. Recommendation.

For reasons discussed above, the Consumer Advocate recommends that the modifications to the CINC program be approved on a temporary basis. The Commission should require that further information be provided, as indicated herein, to support a review of the "final" DSM programs that the Company proposes to implement.

E. REMAINING INTERIM DSM PROGRAMS.

The Consumer Advocate understands that two existing DSM programs would complete the DSM program package that HECO proposes to implement on an interim basis. These two are the Residential Water Heating ("RWH") Program and the Residential New Construction ("RNC") Program. The Company's December 5 filing did not address these programs. As a result, the Consumer Advocate relies on the information provided in Docket No. 04-0113 in its assessment of these two programs and assumes that HECO wants to be authorized to continue the programs as currently

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23 See Exhibit A, page 2.

authorized until the matter can be determined in the final Decision and Order to be issued in the instant proceeding.

Based on the Company's filings in Docket No. 04-0113 (see, e.g., HECO-1102, at 68) these two programs are, at best, only marginally cost-effective. In 04-0113, Exhibit HECO-1102, page 160, the benefit cost ratio under the Total Resource Cost Test for the Residential water Heating Program is 0.75, or less than 1.0. On page 161 of the same Exhibit, the benefit cost ratio under the Total Resource Cost Test for the Residential New Construction Program is 1.03, or barely above 1.0. However, the Consumer Advocate understands that the RWH Program may be contributing capacity savings to mitigate HECO's alleged reserve capacity deficiency. In addition, the RNC Program may be important because it takes advantage of an immediate opportunity to improve the efficiency of housing units that currently are, or soon may be, under construction. Therefore, the Consumer Advocate recommends that the Commission accept the continuation of these programs as part of HECO's interim DSM program package.

Nonetheless, there are important unanswered questions relative to these two programs that the Commission should direct the Company to address in the long-term. For example, the Company should explain whether and to what degree these programs represent part of an effective response to its current and foreseeable needs – once those needs are specifically established. In addition, the Company should revisit the question of cost-effectiveness. The Consumer Advocate appreciates that the recognition of a continuing need for capacity savings may affect the benefit side of the Benefit/Cost analysis. However, some explicit discussion of this issue and the current benefit/cost Ratios for these programs also would be warranted. Other questions may arise as basic information on the current state of these remaining Interim DSM programs is made available.

F. SOME GENERAL COMMENTS ON ALL INTERIM DSM PROGRAMS.

The Company has included many assumptions in its Interim DSM Proposals. These include growth rates in general inflation, avoided capacity and energy costs, and the energy component in rates. In the benefit/cost analyses, these growth rates are all assumed to be the same 3.8% per year. The Consumer Advocate recommends that the Commission direct the Company to provide better information regarding these assumptions. For example, what is the basis for the 3.8% escalation rate or the 8% discount rate used in the benefit cost calculations? In addition, the Company should be instructed to provide more detailed support for the administration costs assumed in the benefit/cost analyses for all interim programs. For example, pages 6, 9, and 12 of Exhibit A provide estimates of implementation, tracking evaluation, engineering studies, advertising, and administration costs for the three C&I programs. It would be helpful to receive more detail about what is contained in these figures, how they were determined, and how they have changed from the 2005 M&E Report in order to perform an independent assessment of the reasonableness of the assumptions.

V. HECO'S CONTINUED ATTEMPTS TO RECOVER LOST MARGINS AND SHAREHOLDER INCENTIVES IN SPITE OF THE COMPANY'S PRIOR AGREEMENT TO TERMINATE SUCH RECOVERY IN THE COMPANY'S NEXT RATE CASE IS INAPPROPRIATE.

The Consumer Advocate brings the Commission's attention to the October 5, 2001 Stipulation Agreement between HECO and the Consumer Advocate, as filed in Docket No. 00-0169. The Consumer Advocate understands this document to establish an agreement by which HECO would not be seeking recovery of lost margins and shareholder incentives subsequent to an interim or final decision and order in the next rate proceeding, whichever comes first. The Commission issued Interim Order No. 22050 on September 27, 2005 in Docket No. 04-0113. Thus, it would appear that, consistent with the October 5, 2001 Stipulation Agreement, HECO should cease to recover lost margins and shareholder incentives with the Commission's approval of the Interim DSM Proposals.

The Consumer Advocate emphasizes that it understands the Stipulation Agreement to establish a definitive framework by which HECO would end all forms of rate recovery for lost margins and shareholder incentives. The Consumer Advocate is dismayed by the Company's continued attempts to recover lost margins and shareholder incentives in spite of the previous agreement. What was understood to be a clear agreement on this matter appears to have been set aside by the Company as it seeks to creatively circumvent this agreement in its approaches to DSM ratemaking.

As background, the Stipulation Agreement states (at 2-3), in relevant part that HECO and the Consumer Advocate specifically agreed to the following:

> b. HECO may continue to accrue lost margins resulting from HECO's three existing C&I DSM programs through the date that interim rates as a result of the next rate case are effective, and the lost margins accrued until such time may be recovered through the IRP Clause. HECO agrees that the continuation of the recovery of lost margins after 2001 to the next rate proceeding will not allow the Company to exceed its current authorized rate of return. [Footnote omitted.] ***HECO will not seek continuation of lost margins recovery in the next rate case.*** [Emphasis added.]

c. HECO and the Consumer Advocate agree that HECO may continue to accrue shareholder incentives through the date that interim rates as a result of the next rate case are effective, and shareholder incentives accrued until such time may be recovered through the IRP Clause. HECO agrees to reflect shareholder incentives earned after 2001 in the monthly calculation of its operating revenues, beginning effective January 2002 until interim rates as a result of the next rate case are effective. HECO agrees that the continuation of the recovery of shareholder incentives will not allow the Company to exceed its current authorized rate of return. [Footnote omitted.] ***HECO will not seek continuation of shareholder incentives in the next rate case.*** [Emphasis added.]

The Consumer Advocate observes that other documents support its understanding of the Stipulation Agreement. For example, in Order No. 19019 filed in Docket No. 00-0169 on November 15, 2001, the Commission took note of the Stipulation Agreement as follows:

6. HECO agrees that it will not seek the continuation of lost margins recovery in its next rate case or thereafter.[24]

10. HECO agrees that it will not seek the continuation of shareholder incentives recovery in its next rate case or thereafter.[25]

13. The parties agree that with respect to program costs, HECO's affiliates, Hawaii Electric Light company, Inc. ("HELCO") and Maui Electric Company Limited ("MECO"), will take the necessary steps to implement any changes ordered and approved by the Commission in HECO's next rate case, within one year from when such costs are incorporated into HECO's next rate case. ***At that time, HECO represents that HELCO and MECO will cease accrual of lost margins and shareholder incentives.***[26] [Emphasis added.]

Importantly, the Commission went on to state in Order No. 19019 that:

> In particular, despite HECO's agreement and commitment to not seek the recovery of lost margins and shareholder incentives in its next rate case or

24 See Order No. 19019, Section II.B., page 4.

25 See Order No. 19019, Section II.B., page 5.

26 See Order No. 19019, Section II.B., pages 5-6.

> thereafter, we must accentuate our desire that HECO continue to pursue a responsible balance to meet "near and long term energy needs in an efficient and reliable manner at the lowest reasonable cost" while, at the same time, also providing ample opportunities to ratepayers to strive for energy efficiency through the various DSM programs such as those program it proposes to implement in this docket . . . We, however, expect HECO to have the same level of commitment subsequent to HECO terminating the recovery of either lost margins or shareholder incentives. Accordingly, in light of the above, we conclude that the proposed agreements, terms and conditions and [sic] made part of this order, subject to certain conditions and modifications described herein and in further detail in Section III below.

It is also noteworthy that Section III., Ordering Paragraph 1 of Order No. 19019 stated:

> ***The proposed agreements, terms and conditions of the parties' Stipulation filed on October 5, 2001, are approved and shall be made part of this order***, subject to certain conditions and modification described herein and more specifically below. [Emphasis added.]

Ordering Paragraphs 2 through 10 of such Order do not negate HECO's agreement to not continue recovery of lost margins and shareholder incentives effective the "next rate case." In fact, the discussion in Ordering Paragraph 4 of Order No. 19019 acknowledges the Company's agreement, which was approved. The Commission stated:

> ***HECO shall be allowed to recover lost margins and shareholder incentives accrued through the date that interim rates are established as a result of this next rate case,*** and that such lost margins and shareholder incentives accrued until such time may be recovered through the existing surcharge mechanism. Commencing from January 2002, HECO shall calculate . . . HECO and the Consumer Advocate shall work together to determine the method of allocating any refund to ratepayers. [Emphasis added.]

The Consumer Advocate also observes that the Commission's IRP Framework does not mandate the recovery of lost margins and shareholder incentives. Rather, the Framework in Section III.F. states:

> 2. Under appropriate circumstances, the utility ***may*** recover the net loss in revenues sustained by the utility as a result of successful implementation of full-scale demand-side management programs sponsored or instituted by the utility; and

3. Under appropriate circumstances, the commission ***may*** provide the utility with incentives to encourage participation in and promotion of full-scale demand-side management programs. [Emphasis added.]

Accordingly, the Consumer Advocate requests that the Commission approve for implementation the Company's Interim DSM Proposals without any form of lost margin recovery or shareholder incentives.

VI. CONCLUSION.

HECO claims to have a reliability problem caused by the reserve capacity shortfall that requires an immediate response. The Company has indicated that the Interim DSM Proposals that it identifies can be easily implemented and can help achieve peak load reductions quickly. In this context, the Consumer Advocate recommends that the Commission act quickly to approve HECO's Interim DSM Proposals on a temporary basis. However, the important issues identified herein by the Consumer Advocate should be revisited as the Commission considers the Company's "final" DSM program proposals in this docket.

In advancing these recommendations, the Consumer Advocate anticipates that HECO will (1) promptly develop an up-to-date assessment of its alleged need for additional reserve capacity during the Summer of 2006 (perhaps in conjunction with its Spring 2006 Adequacy of Supply report to the Commission), and (2) take immediate action to implement the demand- and supply-side projects that would be needed to prevent any reliability deficiencies from adversely affecting customers.

Sincerely yours,

Cheryl S. Kikuta

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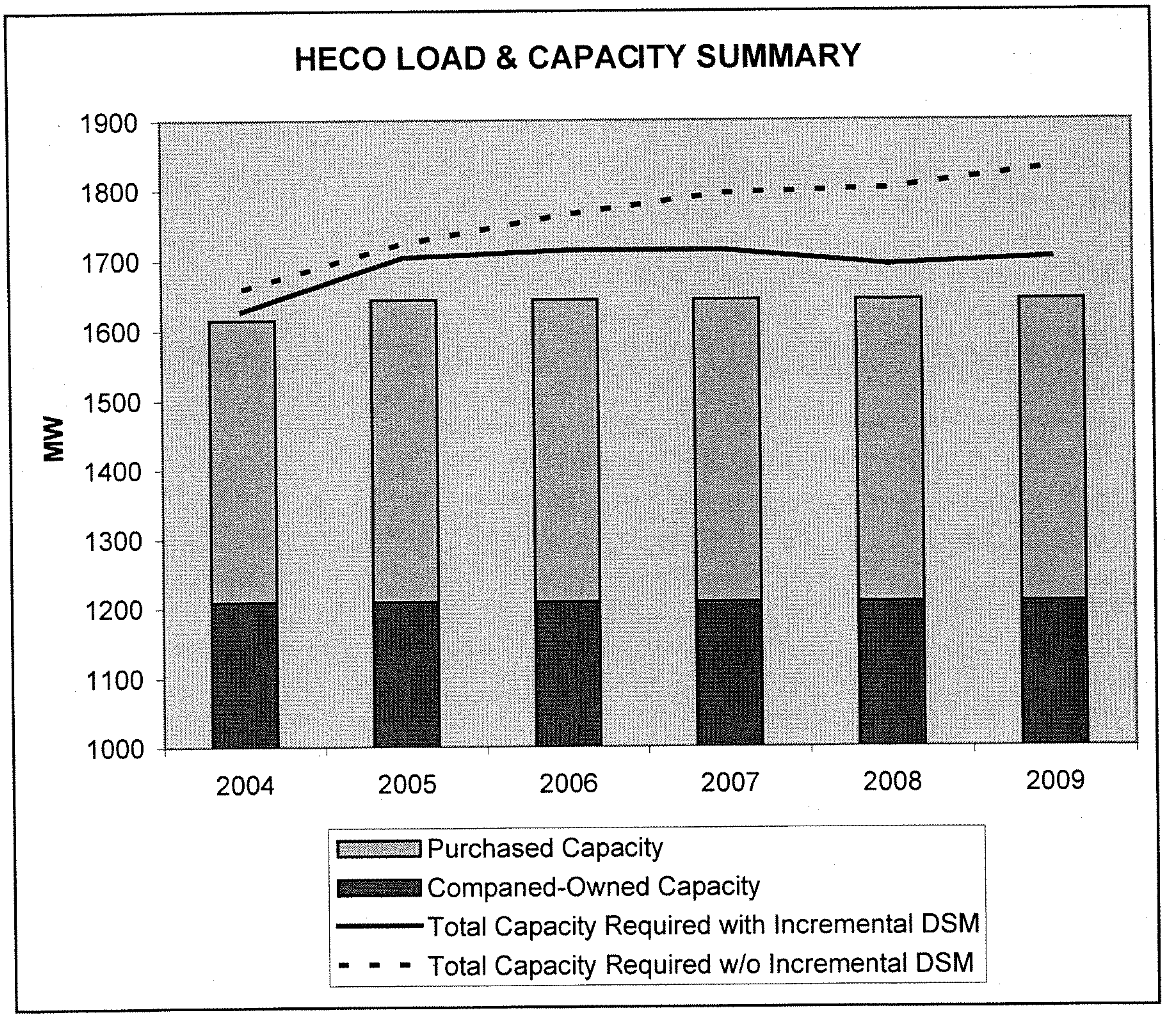
Attachment 1



	2004	2005	2006	2007	2008	2009
Companed-Owned Capacity	1209	1209	1209	1209	1209	1209
Purchased Capacity	406	435	435	435	435	435
Total Capacity Required w/o Incremental DSM	1659	1724	1765	1796	1803	1833
Total Capacity Required with Incremental DSM	1628	1704	1714	1714	1694	1704

Attachment 2

HECO March 10, 2005 AOS
Summary Table

		actual 2004	forecast 2005	forecast 2006	forecast 2007	forecast 2008	forecast 2009
Peak Load	[1]	1,327	1,329	1,370	1,399	1,413	1,442
LM, EE, CHP							
RDLC	[2]		3	8	13	16	16
CILDC	[2]		4	9	13	18	19
EE	[2]		9	19	28	37	47
utility CHP	[2]		0	3	9	13	18
non-utility CHP	[2]		0	1	1	2	2
subtotal		25	16	40	64	86	102
Net System Load	[3]	1,302	1,313	1,330	1,335	1,327	1,340
Actual / Required Reserve Capacity							
MW	[4]	326	391	384	379	367	364
% of Net System Load		25.0%	29.7%	28.8%	28.4%	27.6%	27.1%
Total Capacity Required		1,628	1,704	1,714	1,714	1,694	1,704
Capacity Resources							
HECO units							
H8		52.9	52.9	52.9	52.9	52.9	52.9
H9		54.4	54.4	54.4	54.4	54.4	54.4
W3		46.2	46.2	46.2	46.2	46.2	46.2
W4		46.4	46.4	46.4	46.4	46.4	46.4
W5		54.6	54.6	54.6	54.6	54.6	54.6
W6		55.6	55.6	55.6	55.6	55.6	55.6
W7		88.1	88.1	88.1	88.1	88.1	88.1
W8		88.1	88.1	88.1	88.1	88.1	88.1
W9		51.9	51.9	51.9	51.9	51.9	51.9
W10		49.9	49.9	49.9	49.9	49.9	49.9
K1		88.2	88.2	88.2	88.2	88.2	88.2
K2		86.3	86.3	86.3	86.3	86.3	86.3
K3		88.2	88.2	88.2	88.2	88.2	88.2
K4		89.2	89.2	89.2	89.2	89.2	89.2
K5		134.7	134.7	134.7	134.7	134.7	134.7
K6		133.9	133.9	133.9	133.9	133.9	133.9
subtotal	[5]	1,208.6	1,208.6	1,208.6	1,208.6	1,208.6	1,208.6
IPPs							
Kalaeloa1		90.0	104.5	104.5	104.5	104.5	104.5
Kalaeloa2		90.0	104.5	104.5	104.5	104.5	104.5
AES		180.0	180.0	180.0	180.0	180.0	180.0
H-Power		46.0	46.0	46.0	46.0	46.0	46.0
subtotal	[6]	406.0	435.0	435.0	435.0	435.0	435.0
Total		1,615	1,644	1,644	1,644	1,644	1,644
Reserve Capacity Surplus/(Deficiency)	[7]	(13)	(60)	(70)	(70)	(50)	(60)
System Reliability (days/yr)	[8]	n/a	1.2	1.0	0.9	1.6	1.1

[1] actual from page 1; forecast from table 1, page 10 June 2004 forecast
[2] forecast from pages 4 and 5 of appendix 2
[3] actual per page 1; forecast figures calculated from data provided above
[4] actual 2004 reserve margin was 25% per page 8, forecast figures are required reserves calculated from deficiencies
[5] per page 2
[6] per page 2
[7] 2004 actual calculated; forecast figures input from Table 4 page 18
[8] per Table 3, page 17
note: shaded areas are input; remaining cells are calculated